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Syphilology

Blood Wassermann—The importance credited to the blood Wassermann reaction in the diagnosis of syphilis is very greatly overestimated by the laity, and also by many physicians. It is very common to hear, "My doctor says this cannot be syphilis because my blood is negative,' when we are dealing with an obviously syphilitic lesion, which furthermore clears up under antisyphilitic treatment. The blood Wassermann may be said to be uniformly positive in the early sec-ondary stage of syphilis, in paresis and in congenital syphilis from the second month to the end of the second year. In all other stages the chances are about even; the test will be negative even in the presence of active symptoms.

The following statistics for negative Wassermann tests may be found in the literature: In cardiovascular syphilis Stokes reports 40 per cent; Elliott, 40 per cent; Reid, 17 per cent in fifty-four necropsies; Cumner and Dexter, 25 per cent in thirty-six cases; Longcope, 26.5 per cent negative in forty-seven cases. In gastric syphilis, we find H Schlesinger saying, "A negative Wassermann is very frequent in syphilis of the inner organs." Many authors, as Pick, Eisenklam, Warthim, Neugebauer, Holler, etc., have reported cases with negative reactions. Frequently the diagnosis of gastric syphilis is only apparent after a therapeutic test. In general neurosyphilis Stokes says 40 per cent show a negative blood Wassermann; the same figure is given for tabes after the first decade.

From this one can easily see why the experienced syphilologist places very little importance on a negative blood Wassermann in the diagnosis of syphilis.

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Radiology

The Uses of Lipiodol in Roentgenographic **Diagnosis**—Until recent years the opaque substances in common use in x-ray laboratories were the barium and bismuth salts in gastrointestinal examinations, and the iodids and bromids in urological diagnosis. The use of lipiodol for roentgenological diagnosis dates back only to 1921. In that year Sicard and Forestier reported on its use as a means of localizing spinal cord tumors and other obstructions in the spinal canal.

Lipiodol is a vegetable oil containing 40 per cent iodin content by weight and is very opaque to the x-rays, due to the high atomic weight of the iodin. It had previously been used therapeutically as a form of iodin medication, being given in the form of intramuscular injections. Forestier and Sicard accidentally noted that roentgenograms made several weeks later showed opaque spots

corresponding to the site of the injection. This finding, together with the known harmlessness of the substance, suggested its use as a means of making the subdural and epidural spaces visible

in a roentgenogram.

The use of lipiodol as an aid to roentgenological diagnosis was soon extended from the spinal canal to other regions of the body. Forestier in 1922 devised a suitable technique for making the bronchial tubes roentgenologically visible after intratracheal or intrabronchial injections, although its use for this purpose was not generally adopted until 1924 and 1925. Pritchard, Grady, Archibald, and many others have contributed to our knowledge of the technique of administration and the interpretation of the x-ray findings after its administration.

The method is of especial value in depicting, localizing, and outlining all the bronchial or pulmonary cavities which communicate with the bronchial tree. Small bronchiectatic cavities formerly not seen in the roentgenogram, with this method can be plainly visualized even in areas difficult to examine, such as the retrocardiac region.

Abscesses of the lung are very difficult to render visible at the beginning of their development, but later their detection is easy, especially with the bronchoscope. Besides these the utility of lipiodol should be mentioned in such conditions as occlusion of a bronchus, in the localization of certain non-opaque foreign bodies, of bronchial deviations, bronchopulmonary fistulas, and tumors primary in the bronchus. It is of little aid in diagnosing diseases of the parenchyma of the lung.

Lipiodol has been used with success in the exploration of fistulas and draining sinuses from such delicate tissues as the liver, kidney, and lungs, since it produces no irritation. Furthermore, it is preferable to bismuth paste as it does not occlude drainage.

Intra-arterial injection has resulted in localization of blood vessel obstructions caused by thrombosis or embolism. In the eye, nose, and throat field lipiodol has been used in the examination of the lachrymal ducts and the nasal accessory

In the urological field pyelograms and cystograms have been made using lipiodol as the opaque media, although its use is not at all common. Heuser in 1925 was the first to report its use in the field of gynecologic diagnosis. Newell and Jarcho have found the procedure to be of diagnostic value in cases of sterility in which the tubes are obstructed; in such cases it enables one to determine the character and location of the obstruction and whether or not the case is suitable for operation.

When several masses are palpated within the pelvis, the method clearly differentiates the uterus from the other masses. One can also determine whether a pelvic tumor originates from the uterus or ovary, and whether the uterine cavity is encroached on by any tumor masses. Finally chronic appendicitis, right-sided salpingitis, can at times be distinguished from when this method is used.

The chief objection to the use of lipiodol is probably that of its relative high cost, which is